

What is claimed is :

1. A backlight unit comprising:

a plurality of lamp tubes, arranged with a selected interval;
a diffuser plate, disposed above said lamp tubes for passing
5 and diffusing the light emitted from said lamp tubes; and

a reflector plate, disposed beneath said lamp tubes for
reflecting the light emitted from said lamp tubes back to said
diffuser plate, wherein said reflector plate has a plurality of
particles fabricated thereon for scattering the reflected light
10 uniformly.

2. The backlight unit of Claim 1, wherein said particles are
made of spherical dots with diameters of 5 to 100 micrometer.

15 3. The backlight unit of Claim 2, wherein a portion of said
spherical dots right under said lamp tubes have large diameters,
while the other portion of said spherical dots under two sides of
said lamp tubes have less diameters.

20 4. The backlight unit of Claim 2, wherein a portion of said
spherical dots right under said lamp tubes have the most large
diameter, while the other portion of said spherical dots right under

the central area between two adjacent lamp tubes have the smallest diameter.

5 5. The backlight unit of Claim 2, wherein the diameter of said spherical dots is decreasing with the increasing of the distance between said spherical dots and one adjacent said lamp tube.

10 6. The backlight unit of Claim 1, wherein said particles are made of spherical dots with diameters of 5 to 100 micrometer.

15 7. The backlight unit of Claim 6, wherein a portion of said spherical dots right under each one said lamp tube are arranged closer together, while the other portion of said spherical dots distributed along the two lateral sides of said lamp tube are becoming farther apart.

20 8. The backlight unit of Claim 1, wherein said reflector plate has a reflector coating layer applied thereon for coating onto surfaces of said particles so as to promote the reflecting efficiency.

9. The backlight unit of Claim 8, wherein said reflector coating layer is applied to reflect the light with the wavelength of 400 to 700 nanometers.

10. The backlight unit of Claim 8, wherein the material of said reflector coating layer is chosen from the group of aluminum, silver and alloy thereof.

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11. A backlight unit comprising:

a plurality of lamp tubes, arranged with a selected interval;

a diffuser plate, disposed above said lamp tubes for passing and diffusing the light emitted from said lamp tubes; and

10 a reflector plate, disposed beneath said lamp tubes for reflecting the light emitted from said lamp tubes back to said diffuser plate, wherein said reflector plate has a plurality of particles formed thereon for scattering the reflected light, wherein a portion of said particles right under each one said lamp tube are
15 arranged closer together, while the other portion of said particles distributed along two lateral sides of said lamp tube are becoming farther apart.

12. The backlight unit of Claim 11, wherein said particles are
20 made of spherical dots with diameters of 5 to 100 micrometer.

13. The backlight unit of Claim 11, further comprising a reflector coating layer applied onto said reflector plate for coating

on surfaces of said particles so as to promote the reflecting efficiency.

14. The backlight unit of Claim 13, wherein said reflector coating layer is applied to reflect the light with the wavelength of 400 to 700 nanometers.

15. The backlight unit of Claim 13, wherein the material of said reflector coating layer is chosen from the group of aluminum, silver and alloy thereof.

16. A backlight unit comprising:
a plurality of lamp tubes, arranged with a selected interval;
a diffuser plate, disposed above said lamp tubes for passing
and diffusing the light emitted from said lamp tubes; and
a reflector plate, disposed beneath said lamp tubes for reflecting the light emitted from said lamp tubes back to said diffuser plate, wherein said reflector plate has a plurality of particles formed thereon for scattering the reflected light, wherein a portion of said particles right under each one said lamp tube have large diameters, while the other portion of said particles distributed along two lateral sides of said lamp tubes have gradually less diameters.

17. The backlight unit of Claim 16, wherein said particles are made of spherical dots with diameters of 5 to 100 micrometer and distributed on said reflector plate uniformly.

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18. The backlight unit of Claim 17, wherein a portion of said spherical dots right under said lamp tubes have the most large diameter, while the other portion of said spherical dots right under the central area between two adjacent lamp tubes have the smallest diameter.

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19. The backlight unit of Claim 16, further comprising a reflector coating layer formed on said reflector plate for coating onto surfaces of said particles so as to promote the reflecting efficiency.

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20. The backlight unit of Claim 19, wherein said reflector coating layer is applied to reflect the light with the wavelength of 400 to 700 nanometers.

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